

## Wood of The Month



### **Pine ssp –Pinus spp.**

Pine is a simple wood, right? On the contrary. There are many varieties of pine as well as characteristics in the field of the pines. Actually, pines are a “softwood” which means they are a conifer (cone-bearing trees) and not angiosperms or deciduous trees which lose their leaves in the fall which make up the hardwoods. However, some pines, the Slash Pine, a yellow pine, has nearly the strength of red oak even though it is softer.

There are two main categories or groupings of pines, hard pines and soft pines. Within these groupings they can be broken down further. Southern yellow pines are probably the hardest and include; Shortleaf Pine (*Pinus echinata*), Slash Pine (*Pinus elliottii*), Longleaf Pine (*Pinus palustris*), and Loblolly Pine (*Pinus taeda*). Additionally, there are secondary species that fall into the Southern yellow pine group which include; Caribbean Pine (*Pinus caribaea*), Sand Pine (*Pinus, clausa*), Spruce Pine (*Pinus glabra*), Table Mountain Pine (*Pinus pungens*), Pitch Pine (*Pinus rigida*), Pond Pine (*Pinus serotina*), and Virginia Pine (*Pinus virginiana*). In addition to the strength and density, hard pines are characterized by abrupt transitions from earlywood to latewood, and by their high grain contrast.

The next grouping is the Western Yellow Pines. They are between the hard and soft pines yet, technically, they’re in the hard pine grouping. Although they have abrupt grain transitions, they tend to be lighter in weight and have a more even grain appearance. Two of the Western Yellow Pines are very difficult to distinguish between and are often sold commercially and interchangeably. They are; Lodgepole Pine (*Pinus contorta*) and Ponderosa Pine (*Pinus ponderosa*). Others in the group are; Jeffery Pine (*Pinus jeffreyi*), Jack Pine (*Pinus banksiana*) and Radiata Pine (*Pinus radiata*).

On the opposite end of the scale, the soft pines are characterized by low density, low grain contrast, and a gradual earlywood to latewood transition. They cannot be reliably separated from one another, but their features can help to distinguish them from the hard pines. The three principal species of soft pine are; Sugar Pine (*Pinus lambertiana*), Western White Pine (*Pinus monticola*), and Eastern White Pine (*Pinus strobus*). Eastern White Pine tends to have the finest texture and the smallest resin canals. Sugar Pine has the coarsest texture and largest resin canals. Western White Pine is widely harvested for construction lumber and is sometimes sold interchangeably with Sugar Pine.

Another group, the red pines, are technically considered hard pines, but tend to blur the lines between hard and soft pines. The red pines are far more prevalent in Europe and Asia, with Red Pine (*Pinus resinosa*) being the sole representative native to the United States and Canada. The list of red pines are; Khasi Pine (*Pinus kesiya*), Austrian Pine (*Pinus nigra*), Scots Pine

(*Pinus sylvestris*), Sumatran Pine (*Pinus merkusii*), Ocote Pine (*Pinus oocarpa*), Patula Pine (*Pinus patula*) and Maritime Pine (*Pinus pin aster*).

What does this all mean to the woodturner? The answer to that question can be as simple as; “what’s available?”, or “what is the turning going to be used for?”, or which wood will give the look desired. Considering strength for a spindle a Southern Yellow Pine might be the best choice or for a soft light piece perhaps a Sugar Pine would be the choice. In either case, sharp tools are definitely required to get a good finish and to avoid chipping. Also, because of the readiness of availability, pine could be a fair practice wood.

Sanding needs to be done with a light touch or use a sanding block because of the abruptness of the earlywood and latewood transition, ridges can be formed by the softer portion sanding away faster than the harder portion. That could be another factor in considering which pine to use. Pine may need to be treated with a sealer before the finish is applied, also because of the difference in porosity of the earlywood and latewood.

A good article on pines can be found on the [wood database](#) .

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